# Modern Engineering

January 25 | Day 12

**Prudential Financial** 



#### Whilst we wait....

#### In chat write:

Your name - role and a recent impulse buy.

Let's give everyone a min or two to join





#### Selenium Testing

## LESSON ROADMAP

Browser Testing Selenium

Testing our
App with
Selenium Lab



#### **MEF MODULE 4 DAY 12: Selenium**

Schedule	
9:00–9:15 am	Welcome and Warm-Up
9:15–9:45 am	End to End Testing and Browser Simulation
9:45 am–11:00 am	Selenium Walkthrough
11:00–12:30 pm	Selenium Lab: Logging in to an Application
12:30–1:30 pm	Lunch
1:30-1:30 pm	Testing with Selenium
1:30–2:30 pm	Selenium Testing the To Do App
2:30 - 4:50 pm	Selenium Test your Express/React App
4:50–5:00 pm	Bring It Home



#### **LEARNING OBJECTIVES**

- Write automated browser tests using Selenium
- 2 Apply Selenium to a react application
- Articulate strategies for balancing unit, integration and end to end tests
- Combine multiple levels of testing into a cohesive testing suite



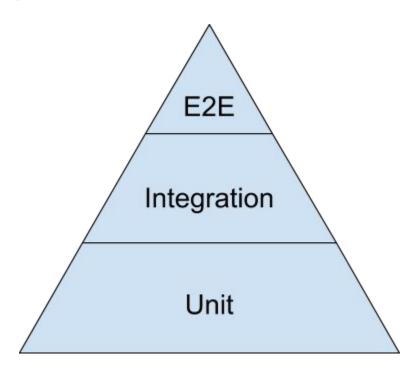
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## **End to End Browser Testing**

#### **E2E Testing: The Cherry on Top**

Once all our unit and integration tests pass, it's finally time to add some End-to-End testing simulating the experience of a user.

Google recommends a 70-20-10 proportion of Unit, Integration, and End-to-End tests.



Source: Google Blog / Keynote Presentation



#### Selenium: Let the Robots Do the Clicking!

While we want to test the experience of users clicking and browsing through our app, this doesn't mean we have to do so manually.

The Selenium WebDriver library allows us to programmatically interact with the browser environment.





Let's head over to this git repository to start using Selenium.





#### Selenium Clicking Lab





### **Break Time**



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## **Testing with Selenium**

Let's add some browser testing to the current test suite for our to-do application using Selenium



#### Solo Exercise:



#### Add Selenium Tests to Your App

Now that we've seen how Selenium integrates with our previously written tests, it's time to add some browser UI tests to your own application.

One downside of writing browser tests is locking yourself into the UI you're writing tests for. If you want to change a button or layout, you end having to also re-write the tests associated with it!

Therefore, you should prioritize the parts of your front-end you feel most confident in.





## Solo Exercise: Daily Exit Ticket



 Please take a moment to give us your feedback after today's course!

 Use the QR code or follow the link: <a href="https://bit.ly/pruMEFc2">https://bit.ly/pruMEFc2</a>



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